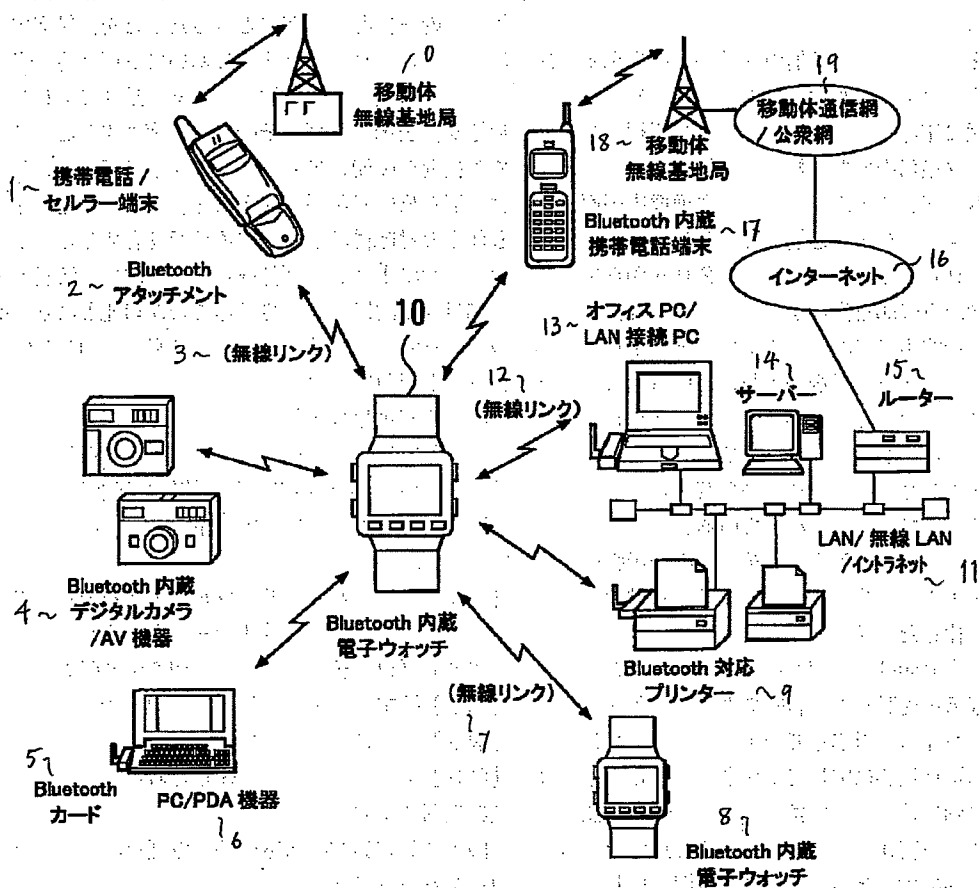


FP04203-IDS (JP2003-295994)

Japanese Unexamined Patent Application Publication No.
2003-295994

DRAWINGS

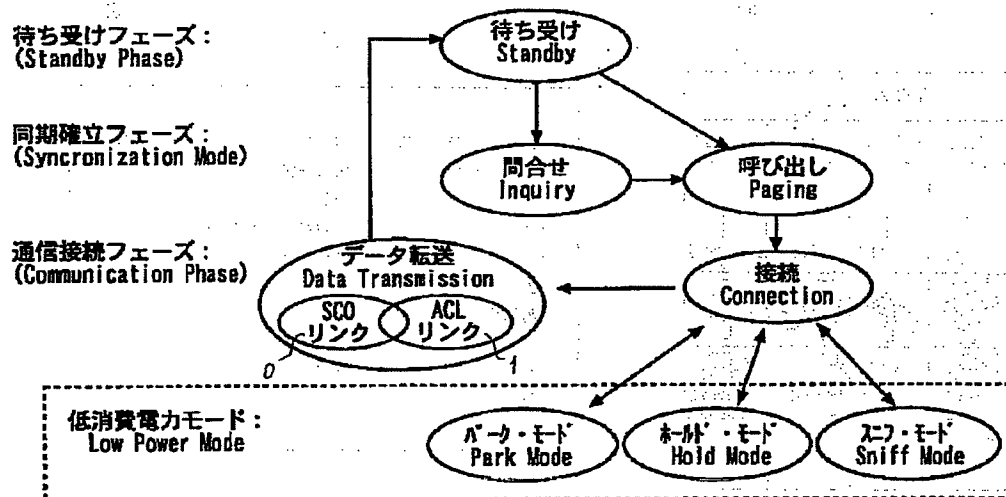
FIG. 1



- 0: Mobile wireless base station
- 1: Mobile phone/cellular terminal
- 2: Bluetooth attachment
- 3: (wireless link)
- 4: Digital camera/AV appliance with built-in Bluetooth
- 5: Bluetooth card
- 6: PC/PDA appliance

- 7: (wireless link)
- 8: Electronic watch with built-in Bluetooth
- 9: Bluetooth-compatible printer
- 10: Electronic watch with built-in Bluetooth
- 11: LAN/wireless LAN/intranet
- 12: (wireless link)
- 13: Office PC/LAN connected PC
- 14: Server
- 15: Router
- 16: Internet
- 17: Mobile phone terminal with built-in Bluetooth
- 18: Mobile wireless base station
- 19: Mobile communication network/public network

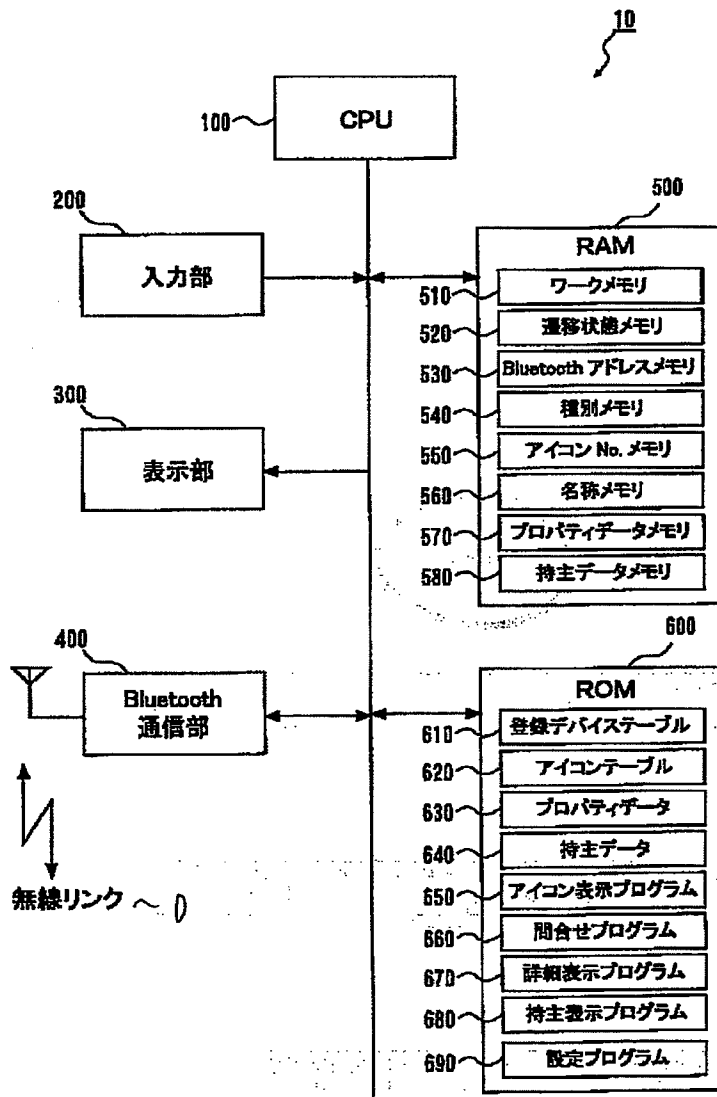
FIG. 2



0: Link

1: Link

FIG. 3



- 0: Wireless link
- 200: Input unit
- 300: Display unit
- 400: Bluetooth communication unit
- 510: Work memory
- 520: Transition state memory
- 530: Bluetooth address memory
- 540: Type memory
- 550: Icon No. memory
- 560: Name memory
- 570: Property data memory

580: Owner data memory
 610: Registered device table
 620: Icon table
 630: Property data
 640: Owner data
 650: Icon display program
 660: Inquiry program
 670: Detailed display program
 680: Owner display program
 690: Settings program

FIG. 4

Bluetooth アドレス	種別	アイコン No.	名称
ADR2	1a 携帯電話	212	My Phone
ADR3	1b ラップトップ コンピュータ	130	Ken's PC
ADR4	1c 腕時計型 ウェアラブル PC	181	Tom's Watch
ADR5	1d デジタルカメラ	810	My Cam
⋮	⋮	⋮	⋮

0: Bluetooth address
 1: Type
 1a: Mobile phone
 1b: Laptop computer
 1c: Wristwatch-type wearable PC
 1d: Digital camera
 2: Icon No.
 3: Name

0: Bluetooth address
 1: Type
 1a: Mobile phone
 1b: Laptop computer
 1c: Wristwatch-type wearable PC
 1d: Digital camera
 2: Icon No.
 3: Name

FIG. 6

630

・Bluetooth アドレス	ADR1
・デバイスコード	00001-000110
	1-8
・種別	腕時計型ウェアラブル PC
・名称	My Watch
・アイコン No.	180
・製造企業名	A 社
・製品名	PRT-2000
・製造年	2000 年
・仕様	

From the top

Bluetooth address

Device code

Type Wristwatch-type wearable PC

Name

Icon No.

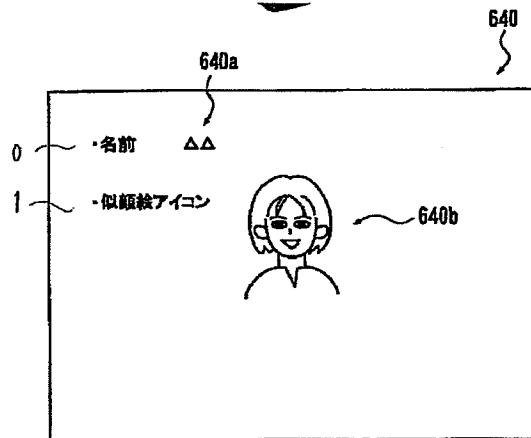
Manufacturing company Company A

Product name

Year of Manufacture Year 2000

Specification

FIG. 7



0: Name

1: Face icon

FIG. 8(a)

(a)

アクセス・コード (72)	ヘッダ (54)	ペイロード (0~2745)
------------------	-------------	-------------------

(72) Access code

(54) Header

(0~2745) Payload

FIG. 8(b)

(b)

Parity Bits (34)	LAP (24)	SR (2)	SP (2)	UAP (8)	NAP (16)	デバイスクラス (24)	AM_ADDR (3)	CLKS27-2 (26)	Page Mode (3)
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(24) Device class

FIG. 8(c)

(c)

サービスクラス (11)	メジャーデバイスクラス (5)	マイナーデバイスクラス (6)	00 (2)
-----------------	--------------------	--------------------	-----------

(11) Service class

(12) Major device class

(13) Minor device class

FIG. 9(a)

(a) 0, 1,

ヒット番号	サービスクラス内容
13	制限ディスカバーモード
14	(予約)
15	(予約)
16	(予約)
17	ネットワーク系(LAN、アドホックなど)
18	出力装置系(プリンタ、スピーカなど)
19	入力装置系(スキャナ、マイクなど)
20	オブジェクト送信系(V-Inbox、V-Folder など)
21	オーディオ系(スピーカ、マイク、ヘッドセットサービスなど)
22	電話系(コードレス電話、モデム、ヘッドセットサービスなど)
23	インフォメーション系(WEB サーバ、WAP サーバなど)

0: Hit number

1: Contents of service class

13: Limit discoverable mode

14: (Reservation)

15: (Reservation)

16: (Reservation)

17: Network system (e.g. LAN, ad hoc)

18: Output device system (e.g. printer, speaker)

19: Input device system (e.g. scanner, microphone)

20: Object transmission system (e.g. V-Inbox, V-Folder)

21: Audio system (e.g. speaker, microphone, head set service)

22: Telephone system (e.g. cordless telephone, modem, head set service)

23: Information system (e.g. WEB server, WAP server)

FIG. 9(b)

(b) 2 3

設定ビット					メジャー(Major) デバイスクラス内容
12	11	10	9	8	
0	0	0	0	0	その他
0	0	0	0	1	コンピュータ(デスクトップ、ノートブック、PDA、電子手帳など)
0	0	0	1	0	電話(携帯電話、コードレス電話、公衆電話、モデムなど)
0	0	0	1	1	LAN アクセスポイント
0	0	1	0	0	オーディオ(ヘッドセット、スピーカ、ステレオなど)
0	0	1	0	1	周辺装置(マウス、ジョイスティック、キーボードなど)
x	x	x	x	x	(06~1E:予約)
1	1	1	1	1	(特定のデバイスクラスを割り当てない)

2: Setting bits

3: Contents of major device class

00000: Other

00001: Computer (e.g. desktop, laptop, PDA, electronic organizer)

00010: Telephone (e.g. mobile phone, cordless phone, public phone, modem)

00011: LAN access point

00100: Audio (e.g. head set, speaker, stereo)

00101: Peripheral device (e.g. mouse, joystick, keyboard)

xxxxx: (06 to 1E: Reservation)

11111: (Specific device class not assigned)

FIG. 9(c)

(c)

メジャー(Major) デバイスクラス	設定ビット						マイナー(Minor) デバイスクラス内容
	7	6	5	4	3	2	
コンピュータ 4a	0	0	0	0	0	1	デスクトップワークステーション
	0	0	0	0	1	0	サーバクラスコンピュータ
	0	0	0	0	1	1	ラップトップコンピュータ
	0	0	0	1	0	0	ハンドヘルド PC/PDA
	0	0	0	1	0	1	パームサイズ PC/PDA
	0	0	0	1	1	0	腕時計型ウェアラブル PC
電話 4b	0	0	0	0	0	1	携帯電話
	0	0	0	0	1	0	コードレス電話
	0	0	0	0	1	1	スマートフォン
	0	0	0	1	0	0	モデム、音声ゲートウェイ
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

4: Major device class

4a: Computer

4b: Telephone

5: Setting bits

6: Contents of minor device class

000001: Desktop workstation

000010: Server class computer

000011: Laptop computer

000100: Hand-held PC/PDA

000101: Palm-size PC/PDA

000110: Wristwatch-type wearable PC

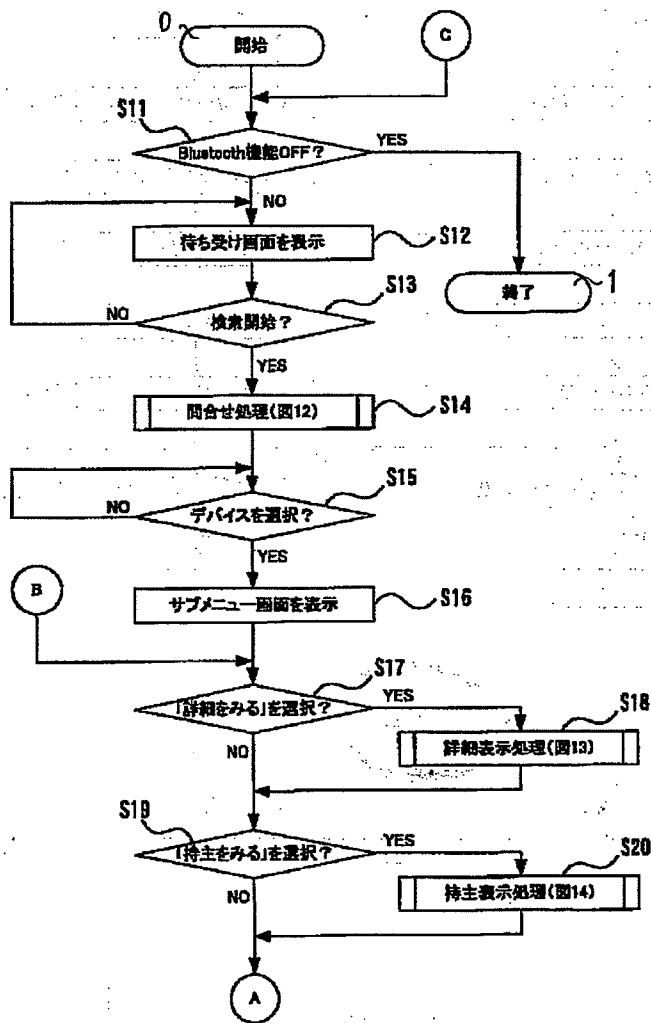
000001: Mobile phone

000010: Cordless phone

000011: Smartphone

000100: Modem, audio gateway

FIG. 10



0: Start

S11: Bluetooth function off?

S12: Display standby screen

S13: Start search?

S14: Inquiry (FIG. 12)

S15: Select device?

S16: Display submenu screen

S17: Select "See details"?

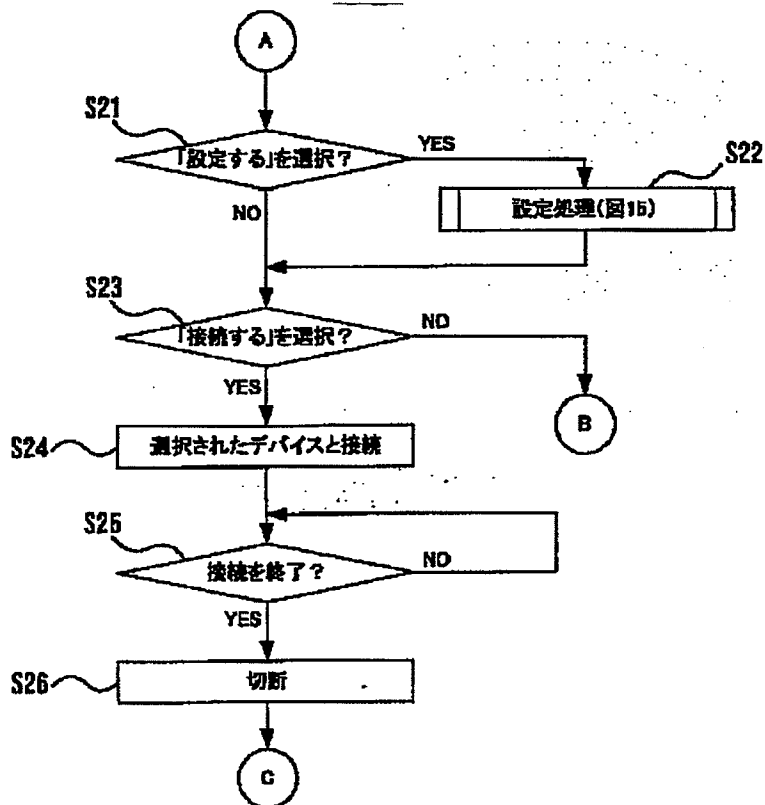
S18: Display details (FIG. 13)

S19: Select "See owner"?

S20: Display owner (FIG. 14)

1: End

FIG. 11



S21: Select "Make settings"?

S22: Make settings (FIG. 15)

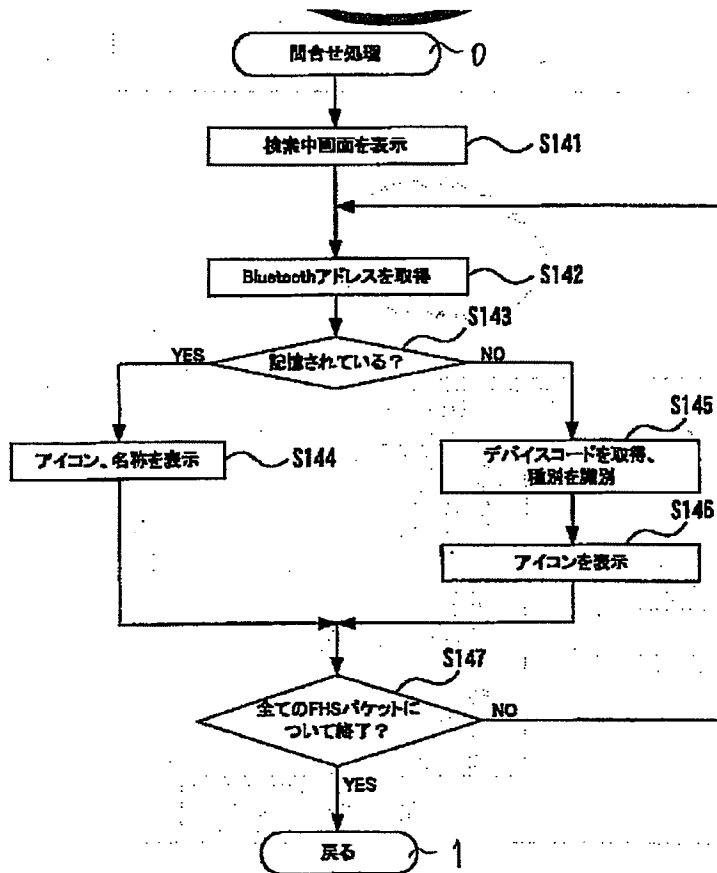
S23: Select "Connect"?

S24: Connect to selected device

S25: Terminate connection?

S26: Disconnect

FIG. 12



0: Inquiry process

S141: Display search-in-progress screen

S142: Obtain Bluetooth address

S143: Stored?

S144: Display icon and name

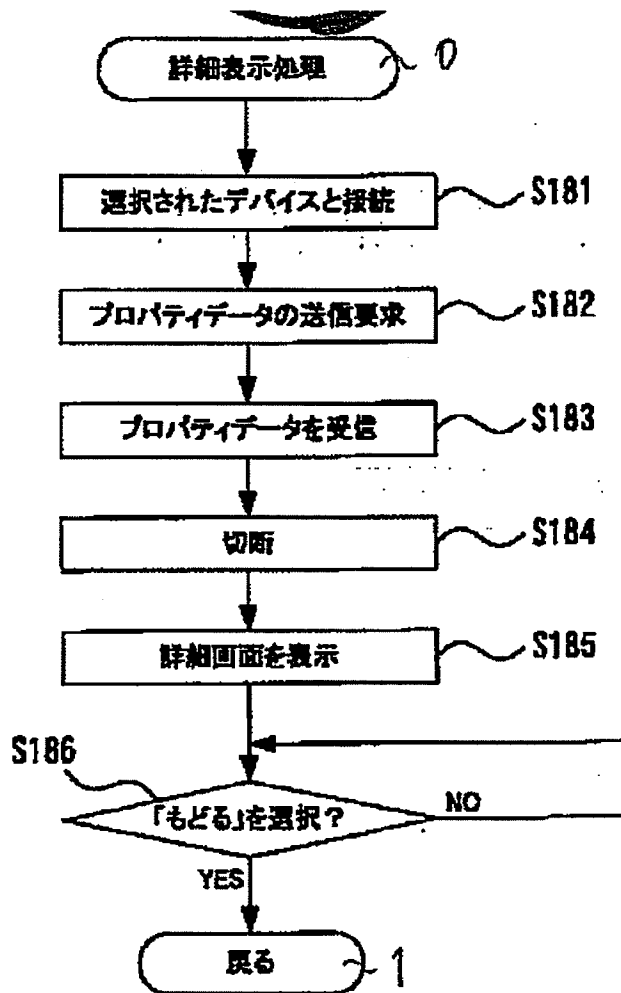
S145: Obtain device code and identify type

S146: Display icon

S147: Finished for all FHS packets?

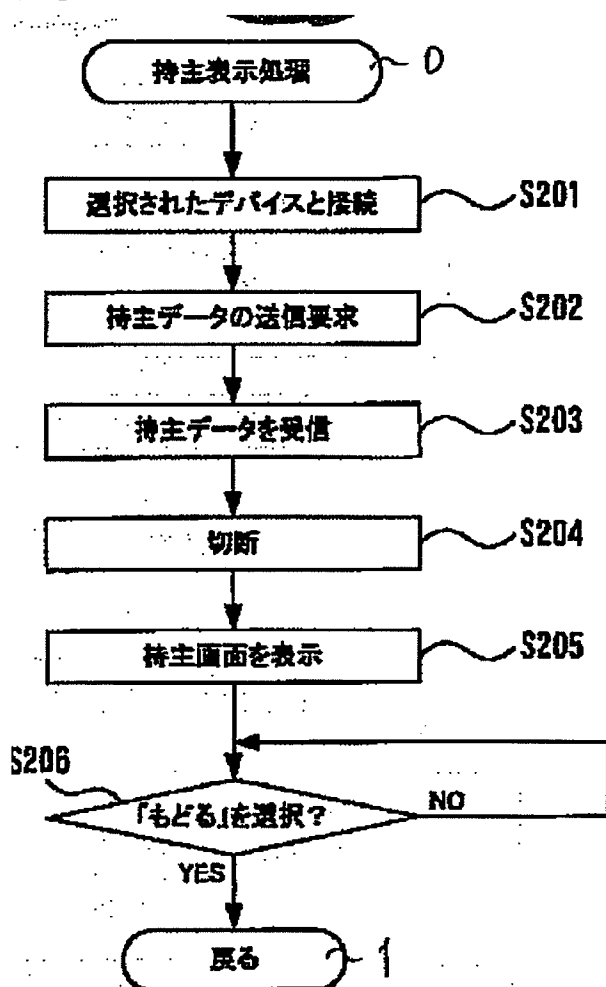
1: Return

FIG. 13



- 0: Process of displaying details
- S181: Connect to selected device
- S182: Request transmission of property data
- S183: Receive property data
- S184: Disconnect
- S185: Display details screen
- S186: Select "Return"?
- 1: Return

FIG. 14



0: Process of displaying owner

S201: Connect to selected device

S202: Request transmission of owner data

S203: Receive owner data

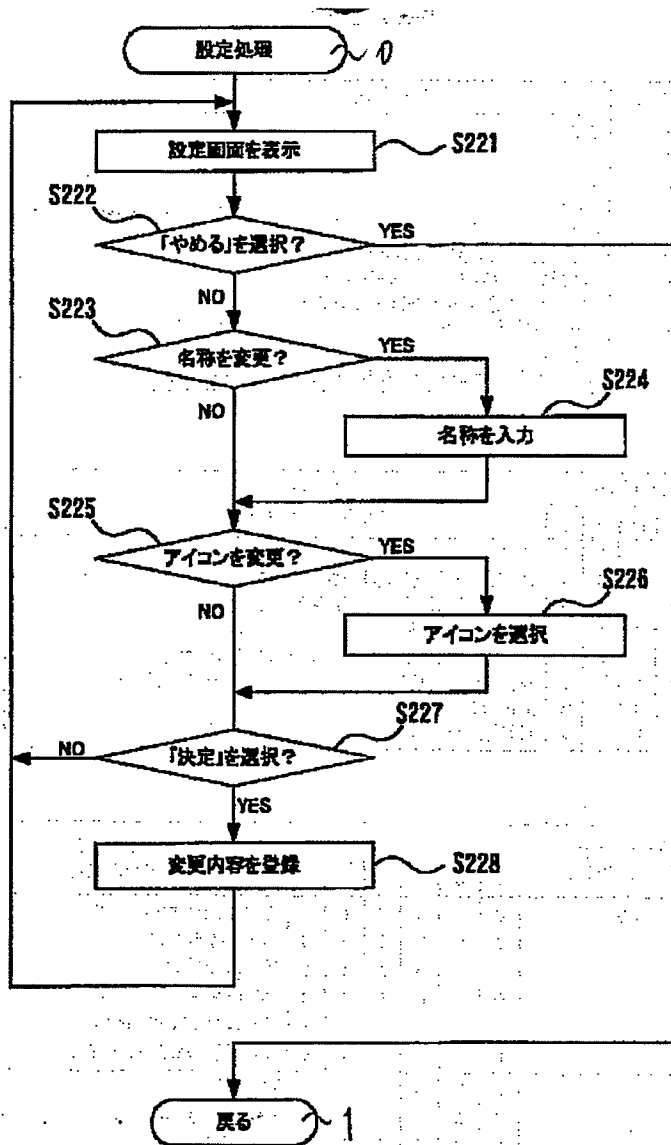
S204: Disconnect

S205: Display owner screen

S206: Select "Return"?

1: Return

FIG. 15



0: Process of making settings

S221: Display settings screen

S222: Select "Quit"?

S223: Change name?

S224: Enter name

S225: Change icon?

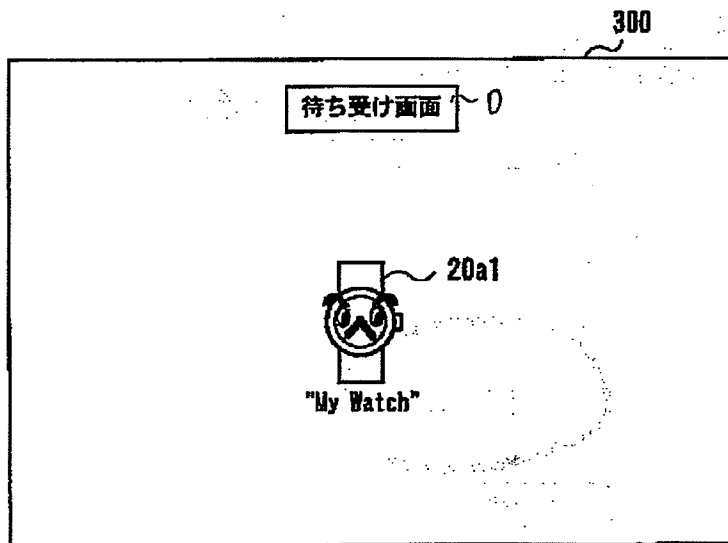
S226: Select icon

S227: Select "Enter"?

S228: Register changed items

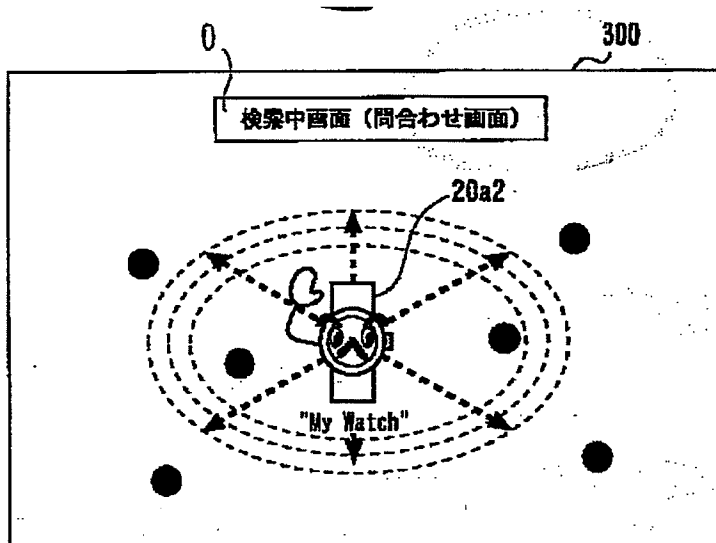
1: Return

FIG. 16



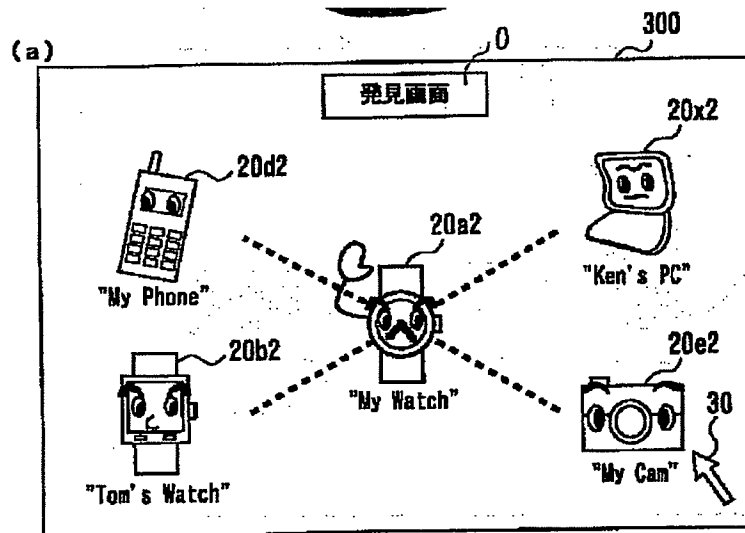
0: Standby screen

FIG. 17



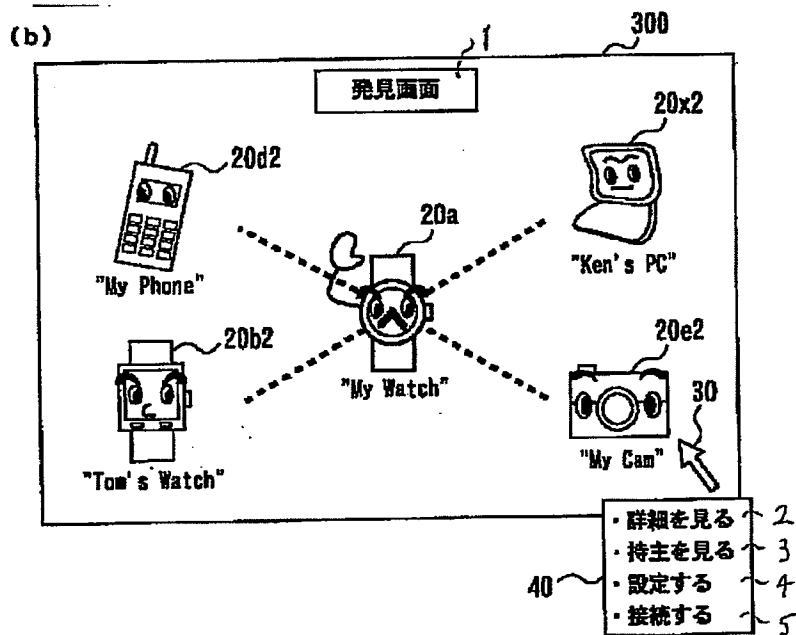
0: Search-in-progress screen (Inquiry screen)

FIG. 18(a)



0: Discovery screen

FIG. 18(b)



1: Discovery screen

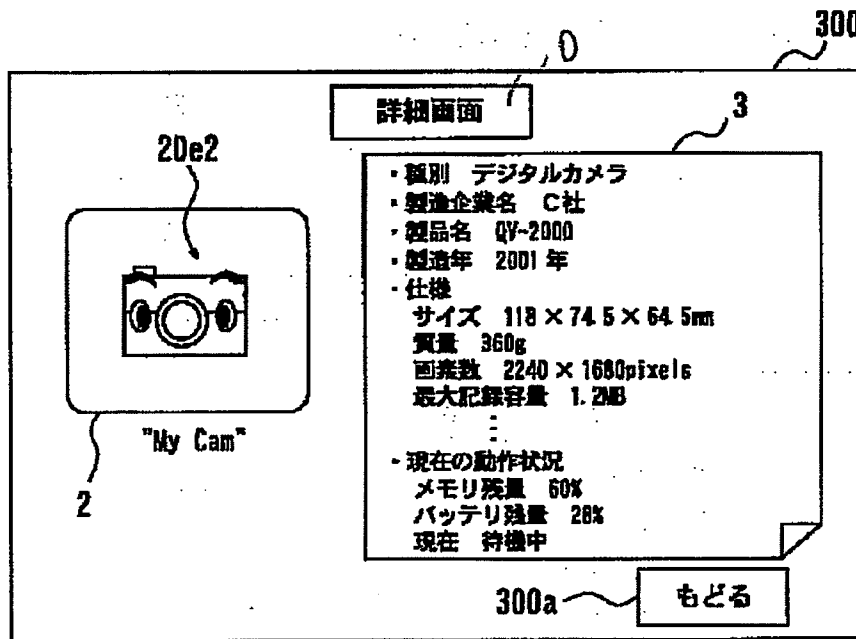
2: See details

3: See owner

4: Make settings

5: Connect

FIG. 19



0: Details screen

300a: Return

Box 3 (from the top):

Type Digital camera

Manufacturing company Company C

Product name

Year of Manufacture Year 2001

Specification

Size

Weight

Pixels

Maximum memory capacity

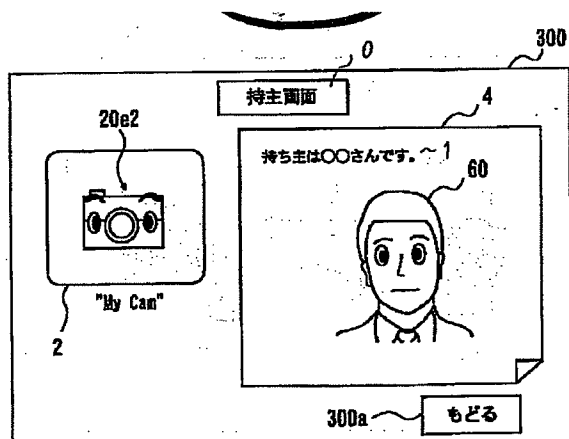
Current operation status

Remaining memory space

Remaining battery

Current status standby

FIG. 20

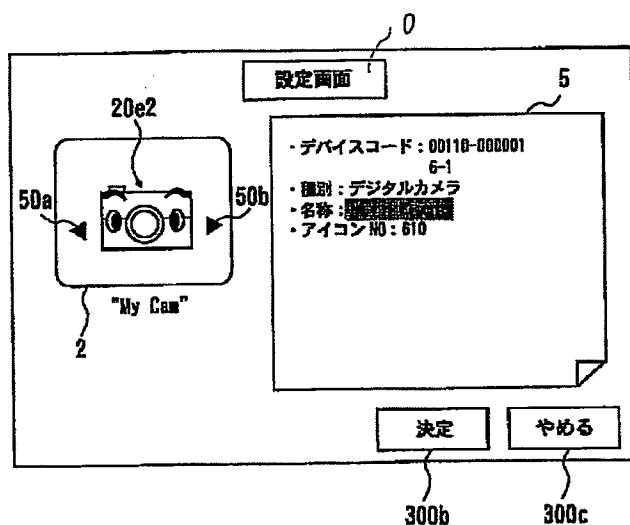


0: Owner screen

1: Mr. ○○ is owner

300a: Return

FIG. 21



0: Settings screen

Box 5 (from the top):

Device code

Type: Digital camera

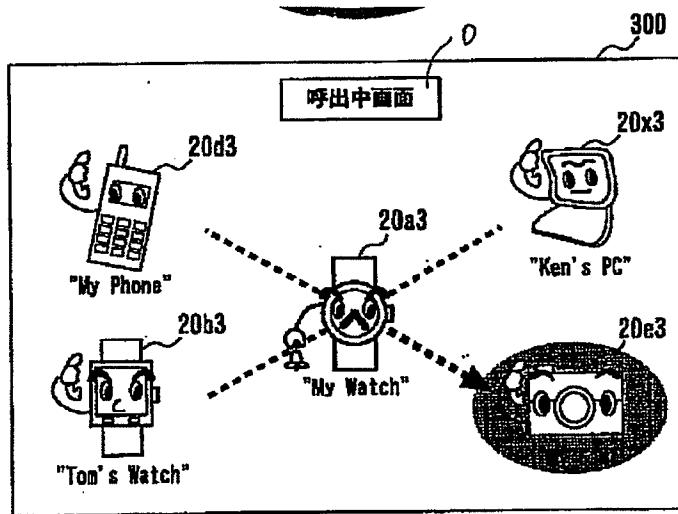
Name

Icon

300b: Enter

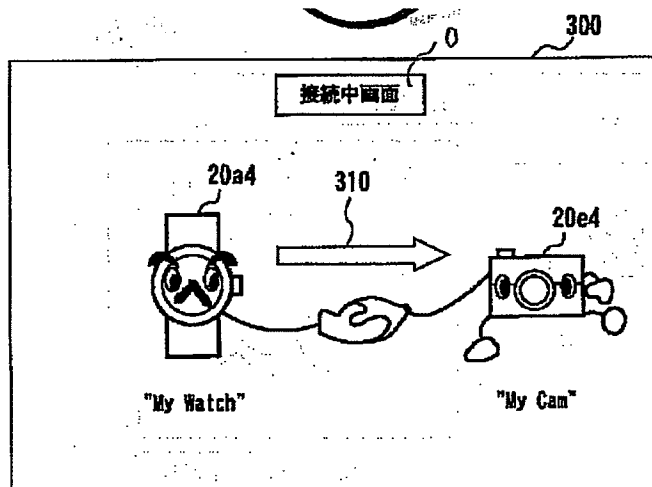
300c: Quit

FIG. 22



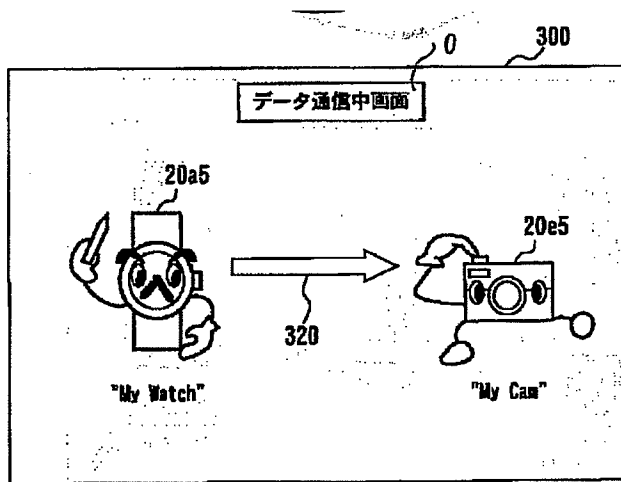
0: Call-in-progress screen

FIG. 23



0: Connection-in-progress screen

FIG. 24



0: Data transmission-in-progress screen